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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/917,235	07/30/2001	Jeffrey D. Van Heumen	DC01 (13202-00314) 412047	8954
27160 7590 05/29/2007 PATENT ADMINISTRATOR KATTEN MUCHIN ROSENMAN LLP 1025 THOMAS JEFFERSON STREET, N.W. EAST LOBBY: SUITE 700 WASHINGTON, DC 20007-5201			EXAMINER COONEY, JOHN M	
			ART UNIT 1711	PAPER NUMBER
			MAIL DATE 05/29/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 09/917,235	<b>Applicant(s)</b> VAN HEUMEN ET AL.	
	<b>Examiner</b> John m. Cooney	<b>Art Unit</b> 1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 29 December 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-65 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-65 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

Applicant's arguments filed 12-29-06 have been fully considered but they are not persuasive.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Falke et al.(6,316,514) in view of Hawker et al.(6,114,458).

Falke et al. discloses the preparation of polyurethane foams prepared from isocyanates, polyols, blowing agents, and other additives and modifier (see the entire document). Falke et al. differs from applicants' claims in that it does not employ the dendritic macromolecules identified by applicants' claims as an additional component. However, Hawker et al. discloses the employment of the dendritic macromolecules of applicants' claims in urethane foam synthesis for the purpose of imparting their viscosity modifying effect (see column 7 lines 56 et seq., and claim 16, as well as, the entire document). Accordingly, it would have been obvious for one having ordinary skill in the art to have utilized the dendritic macromolecules of Hawker et al. in the polyurethane foam preparations of Falke et al. for the desired effect of imparting viscosity modification

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to the reactive mixtures in order to arrive at the compositions and processes of applicants' claims with the expectation of success in the absence of a showing of new or unexpected results.

Applicants' arguments have been considered. However, rejection is maintained for the reasons set forth above. Examiner maintains the prior art to be properly applied as set forth above. Examiner maintains the references to be properly combined as set forth above. It is not seen that applicants' have demonstrated a showing of new or unexpected results which are commensurate in scope with the scope of the claims as they currently stand. When analyzing results the following must be considered:

**Result Must Compare to Closest Prior Art:**

Where a definite comparative standard may be used, the comparison must relate to the prior art embodiment relied upon and not other prior art – *Blanchard v. Ooms*, 68 USPQ 314 – and must be with a disclosure identical (not similar) with that of said embodiment: *In re Tatincloux*, 108 USPQ 125.

**Results Must be Unexpected:**

Unexpected properties must be more significant than expected properties to rebut a prima facie case of obviousness. *In re Nolan* 193 USPQ 641 CCPA 1977.

Obviousness does not require absolute predictability. *In re Miegel* 159 USPQ 716.

Since unexpected results are by definition unpredictable, evidence presented in comparative showings must be clear and convincing. *In re Lohr* 137 USPQ 548.

In determining patentability, the weight of the actual evidence of unobviousness presented must be balanced against the weight of obviousness of record. *In re Chupp*, 2 USPQ 2d 1437; *In re Murch* 175 USPQ 89; *In re Beattie*, 24 USPQ 2d 1040.

#### Claims Must be Commensurate With Showings:

Evidence of superiority must pertain to the full extent of the subject matter being claimed. *In re Ackerman*, 170 USPQ 340; *In re Chupp*, 2 USPQ 2d 1437; *In re Murch* 175 USPQ 89; *Ex Parte A*, 17 USPQ 2d 1719; accordingly, it has been held that to overcome a reasonable case of prima facie obviousness a given claim must be commensurate in scope with any showing of unexpected results. *In re Greenfield*, 197 USPQ 227. Further, a limited showing of criticality is insufficient to support a broadly claimed range. *In re Lemin*, 161 USPQ 288. See also *In re Kulling*, 14 USPQ 2d 1056.

Applicants' have not persuasively demonstrated unexpected results for the combinations of their claims. Comparisons have not been made with the prior art embodiment relied upon. Applicants have not demonstrated their results to be clearly and convincingly unexpected and more than mere optimizations of the knowledge in the art or more significant than being secondary in nature. Applicants' have not demonstrated their showing to be commensurate in scope with the scope of combinations now claimed. While the paragraph number 23 adequately defines

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"dendritic macromolecule" sufficiently allow for it to be used as a claim limitation, it is not seen that its employment is limiting of the claims to the sub-group of dendritic macromolecules discussed in paragraph number 24. Accordingly, examiner's rejection is maintained as proper, and applicants' showing of results is not commensurate in scope with the scope of the claims as they currently stand. Examiner agrees and adds that "dendritic" as a term of art is generally understood to the ordinary practitioner to mean tree-like or highly branched, and a "macromolecule" is generally understood to be a large or complex molecule of molecular weights generally exceeding 1000.

Accordingly, "dendritic macromolecules" are understood by an ordinary practitioner to be large or complex molecules having tree-like or highly branched structures.

Applicants' specification is not seen to give this term any further meaning in a patentable sense in its use in the present claims. Paragraphs 23 and 24 of applicants' supporting disclosure are, furthermore, seen to support examiner's position regarding this terms meaning in the instant case. Paragraph 23 states "dendritic macromolecules" to be "generally known in the art". The paragraph then recites "examples" of these generally known species (i.e. representatives of a group). This description even if taken alone does not even limit the term "dendritic macromolecules" to those dendritic macromolecules identified by the referenced patents at the end of paragraph 23, because applicants clearly recite that these are only examples of the larger generally art known group of molecules which make up dendritic macromolecules.

Additionally, though the combination of references does not specifically indicated load efficiency values of applicants' claim 3, such is not seen to distinguish applicants'

claim over the combined teachings of the prior art. Such is seen to be an intrinsic effect associated with the employment of the combinations provided for by the combined prior art teachings and applicants have not demonstrated these results/effects to be distinguishing for the claim(s) and/or more significant than the expected results associated with the employment of the dendritic macromolecules of Hawker et al. in the preparations of Falke et al.

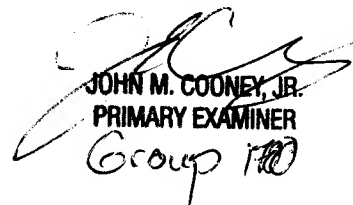
**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Cooney whose telephone number is 571-272-1070. The examiner can normally be reached on M-F from 9 to 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck, can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
JOHN M. COONEY, JR.  
PRIMARY EXAMINER  
Group 110